

1 GENERAL INFORMATION:
 2 APPLICANT: WILLIAMS, JAMES A.
 3 TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
 4 TITLE OF INVENTION: NEUROTOXIN
 5 NUMBER OF SEQUENCES: 30
 6 CORRESPONDENCE ADDRESS:
 7 ADDRESSEE: MEDLEN & CARROLL, LLP
 8 STREET: 120 MONTGOMERY STREET, SUITE 2200
 9 CITY: SAN FRANCISCO
 10 STATE: CALIFORNIA
 11 COUNTRY: USA
 12 ZIP: 94104
 13 COMPUTER READABLE FORM:
 14 MEDIUM TYPE: Floppy disk
 15 COMPUTER: IBM PC compatible
 16 OPERATING SYSTEM: PC-DOS/MS-DOS
 17 SOFTWARE: Patentin Release #1.0, Version #1.30
 18 CURRENT APPLICATION DATA:
 19 APPLICATION NUMBER: US/08/405.496A
 20 FILING DATE: 16-MAR-1995
 21 CLASSIFICATION: 424
 22 PRIOR APPLICATION DATA:
 23 APPLICATION NUMBER: US 08/429.154
 24 FILING DATE: 25-OCT-1994
 25 PRIOR APPLICATION DATA:
 26 APPLICATION NUMBER: US 08/161.907
 27 FILING DATE: 02-DEC-1993
 28 PRIOR APPLICATION DATA:
 29 APPLICATION NUMBER: US 07/985.321
 30 FILING DATE: 04-DEC-1992
 31 PRIOR APPLICATION DATA:
 32 APPLICATION NUMBER: US 07/429.791
 33 FILING DATE: 31-OCT-1989
 34 ATTORNEY/AGENT INFORMATION:
 35 NAME: INGOLIA, DIANE P.
 36 REGISTRATION NUMBER: 60,027
 37 REFERENCE/DOCKET NUMBER: OPHD-01308
 38 TELECOMMUNICATION INFORMATION:
 39 TELEPHONE: (415) 705-8410
 40 TELEFAX: (415) 397-8338
 41 INFORMATION FOR SEQ ID NO: 25:
 42 SEQUENCE CHARACTERISTICS:
 43 LENGTH: 1402 base pairs
 44 TYPE: nucleic acid
 45 STRANDEDNESS: double
 46 TOPOLOGY: linear
 47 MOLECULE TYPE: DNA (genomic)
 48 FEATURE:
 49 NAME/KEY: CDS
 50 LOCATION: 1..1386
 51 US-08-405-496A-25

Query Match	98.6%	Score 1304.4	DB 2	Length 1402
Best Local Similarity	99.9%	Pred. No. 0		
Matches 1305	Conservative 0	Mismatches 1	Indels 0	Gaps 0
OY 12	gagtgctaccttcctgaaatcatcatcaagaacatcatcaatcctccatcctgaaactgcg	71		
DB 84	CGTGCTACCTTCCTACTGATACATCAAGACATCATCAATACCTCCATCTCGAAGCTGG	143		
OY 72	ctacgaatccaatcaactgacgtgacgtctctcgtctacgtctccaaatcaaatcctgggttc	131		
DB 144	C7ACGAATCCAAATCAGCTGATGACGCTGTGTGCGTTCAGCTTCANAAATCAATCGGTTTC	203		
OY 132	taaagctaaacttcgactcgatcgacagaagatcgatcgactgttcaactctggaaacttc	191		
DB 204	TAAAGTTAACTTCGATCCGATCGACAGACGAATCAGATCCAGCTGTTCAACTCGGAATCTTC	263		
OY 192	caaaactgaagtttatcctgaaagaatgctacgtatcacactctatgtacgaanaactcttc	251		
DB 264	CMAATCGAAGTTATCTCGAAGAAATGCTATGCTATACAACTCTATGTACGAANAATCTTC	323		

QY	252	caactctcttcttgatctcgtatccccgaataacttcaactctcaactctctctcgaaactgaata	311
DB	324	CACCTCTCTTGGATCCGTATCCGGAATATTCGAACATCCATCTCTCTGAAACAATGAATA	383
QY	312	caactatcaactgcatggaaacaacttctgggttggaagtatctctcgaaactcaggtga	371
DB	384	CACCAATCAATCAATGCATCGAAACAATCTCTGGTTGGAAAGTATCTCTGAATACGGTCA	443
QY	372	aatcctctgggaactctcgaggaactctcgaggaactcaaacgctggttgatctcaaatctc	431
DB	444	AATCATCTGGACTCTCGAGGACATCAGGAAATCAACACGCGTGTGTATTCAAATACTC	503
QY	432	tcagatgatcaacaatctcttgatctacatacaactcgtctgggtcttcgtttacatacaccaca	491
DB	504	TGATGATGATCAACATCTCTGACTACATCAATCCCTGGAGTCTCGTACCGAAGAACCGATC	563
QY	492	tcgtctgaaataactccaaaaatctcatcaacgcgcgtcttgatcgacagaagaacgattctc	551
DB	564	TGCTCTGAAATACCTCAAAATCTACATCAACCGCGGTGTGATCGCAAGAACCGATCTC	623
QY	552	caactctgggtaacataccacgctctctaaataacatacgtcttcaaatcggaacggttgctcg	611
DB	624	CAATCTGGGTAACTACACGCTCTTAATAACATCATGTTCAAACTGGACGGTGTGCTGCA	683
QY	612	cactcaacggtacacttgatcaaatctcaactcaactcttcgttcgacaaagaactcgaaac	671
DB	684	CACCTCCGGCTACHTCTGGTCTCAATCTCAATCTCTGTCGACGAGACCTGAACGGAAT	743
QY	672	agaaatcaagaactctcgacaaacccggtccaaattcttggtaacctgaaagactctcggg	731
DB	744	AGAAATCAAGAGACTGTACGACAAACCACTCAATCTGGTATCTCTGAAGACTTCTGGGG	803
QY	732	tgaactcctctcgatcgacaaacccgtactacatctgtaactctgctcgcctcgacaaatac	791
DB	804	TGACTACTCTGCTACGACAAACCGTACTACATGCTGTAATCTGATCGATCTCGAACAATA	863
QY	792	cgtctgaactcaacaaatgtaggtatctccgctgttacaatgactcgaaggtccgcgtggttc	851
DB	864	CGTTCAGCTCAACAATGTAGGTATTCGCGGCTTACATGTACTCGAAAGCTCCGCTGGTTC	923
QY	852	tgttatgactaccacacatactactgaaactcttccctctgacgtgggtcgacaaatactcat	911
DB	924	TGTATGACTACCAACATCTACCTGAACATCTTCCCTGTACCGTGTACCAATTCATCAT	983
QY	912	caagaatacagctctggttaacaagaacacatactcgttcgacaacatgactcgtgtacact	971
DB	984	CAAGAAATACCGCTCTGCTACACAGGACCAATATGCTTCGCAACAATGATCTGTATCAT	1043
QY	972	caatgtctgatttaagaacaaagaataacccgtctctggctaccaatgcttctcggactgggtc	1031
DB	1044	CANTGTGTAGTTAGAACAAAGAAATACCCTCTGGCTACCAATCTCTCGACGCTGGTGT	1103
QY	1032	agaaaagatcttgtctctctggaaaatccccggacgcttggtaactctgctcaggtaggttgc	1091
DB	1104	AGAAAAATCTTGTCTGTCTGGAAATCCCGGAGCTTGGTAACTGTCTCTCAAGTACTGT	1163
QY	1092	aatgaataccaagaacgaccaggtgtactcaacaacatgcataatgtaactctcgacagca	1151
DB	1164	AATGAATCCCAAGACGACCAAGGTATCACTAACAAATGCANAAATGAAATCTCGACGACA	1223
QY	1152	caatggttaacgatatcggtttctatcggtttccacccggttcaacaatactcgttaaacctcgt	1211
DB	1224	CANTGTTACGATATCGGTTTCATCGGTTTCACAGTTCACAGTTCACAAATATCCGTAACTGT	1283
QY	1212	tgcttccaaactcgggtacatcgtcagatagaacgcttctctctcgacactctgggttgccttg	1271
DB	1284	TGCTTTCAACTGTATCAATGTGTGAGATCGAAGCTTCTCTCTCGCATCTCTGGGTGCTTTC	1343
QY	1272	ggagttcatctcccggttgatgacggttgggggtgaacgtcccgctgttaa	1317
DB	1344	GGAGTTCACTCCCGGTTGATGACCGTTGGGGTGAACGCTCGCGCTGTA	1389

COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: PATLITE Release 1.0, V
CURRENT APPLICATION DATA: 05/08/480, 604A
PILING DATE: 07-JUN-1995
CLASSIFICATION: 444
PRIOR APPLICATION DATA:
PILING DATE: 14-APR-1995
PRIOR APPLICATION DATA:
PILING DATE: 16-MAR-1995
PRIOR APPLICATION DATA:
PILING DATE: 25-OCT-1994
PRIOR APPLICATION DATA:
PILING DATE: 07-DEC-1993
PRIOR APPLICATION DATA:
PILING DATE: 04-DEC-1992
PRIOR APPLICATION DATA:
PILING DATE: 31-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: INCOLTA, DIANE E.
REGISTRATION NUMBER: 40, 037
REFERENCE/DOCKET NUMBER: OPHD-01766
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 1402 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 1..1386
US-08-480-604A-25

Query Match	98.4%	Score 1311	DB 1	Length 1402
Best Local Similarity	100.0%	Pred. No. 0		
Matches 1311	Conservative 0	Mismatches 0	Indels 0	Gaps 0
16	cgctgctgtctaaccttcacgtatcacatcaagaacatcatcaatctccatctctcgaaac	75		
DB				
79	CGTCTGCTGTCTTACCTTCACTGAATACATCAAGAACATCATCAATACCTTCATCTCGAAAC	138		
DB				
76	ctgcgtctacgaatccaatcacctctgatcgacctgtctgcgtacgtcttccaaaatcaacatc	135		
DB				
139	CTCGCTACGAATCCCAATCACTCATCTCGACCTGTCTCGCTACGCTTTCANNAATCAACATC	198		
DB				
136	ggttctaaagttaactctgacatcgacgaagaatcagatcagcgtcttcaatctggaa	195		
DB				
199	GGTTCTTAAAGTTAACTTTCATCCGATCCGATCGAAGAATCAGATCAGCTGTTCATCTGGAA	258		
DB				
196	tcttccaaaatcgaagtctactctgaaagatgctatctgtaacaaactctatctacgaaac	255		
DB				
259	TCTTCCAAATTCGAAGTATCTCTCAAGATGTATCTGTATACACTCTATCTACGAAAAC	318		
DB				
256	tctccacctctcttggatccgtatctccgaatctctcaacttccatctctctcgaaacat	315		
DB				
319	TTCTCCACCTCTCTTGGATCCGTATCCCGAAATATCTCAACTGCCATCTCTCTGAACAAT	378		
DB				

Qy	316	gaatacaacatctcaactcgatggaacaacattctggttggaagatctctctgaactac	375
Db	379	gnatagaccatcatcactactcgtggaacaacattctggttggaagatctctctgmacatc	438
Qy	376	ggtgaatcatctggactctgcgagacactcggaaatcaaacagcgtgtgtattcaaa	435
Db	439	cgctgaatcatctcgactctcgagacactcaggaatacaaacgctgtgtattcaaa	498
Qy	436	tactctcagatgatcaacatctctgaactacatgaatcgctggatcttcgtttacatcaccc	495
Db	499	tactctcagatgatcaacatctctgactacatcaatcgctggatcttcgtttacatcaccc	558
Qy	496	aacaaatcgctgaataactccaactctcaatcaacggcgcgtctgatacgacagaacacg	555
Db	559	anccatcgctgaataactccaactctcaatcaacggcgcgtctgatacgacagaacacg	618
Qy	556	atctccaaatctggttggaatctccacgctctcttaataacatctatgttcaaacctgacggttcgt	615
Db	619	atctccaaatctggttggaatctccacgctctcttaataacatctatgttcaaacctgacggttcgt	678
Qy	616	cgtgacactcaacgctacatctctggatcaaaatcttcaaatctgtctgacaagaactggaac	675
Db	679	cgctgacactcaacgctacatctctggatcaaaatcttcaaatctgtctgacaagaactggaac	738
Qy	676	gaagaagaatacaagaactctgtacgaacaacagctcaaatcttgatctcctgaagaacttc	735
Db	739	gaagaagaatacaagaactctgtacgaacaacagctcaaatcttgatctcctgaagaacttc	798
Qy	736	tgggggtgaactactcgatgacgaacaacacgtaactacatgtaactgtgtacgatccggaac	795
Db	799	tgggggtgaactactcgatgacgaacaacacgtaactacatgtaactgtgtacgatccggaac	858
Qy	796	aatacagttgacgtatcaaatgttaggtatctcgcggttacaatgtacctgaaaggtccgcgt	855
Db	859	aatacagttgacgtatcaaatgttaggtatctcgcggttacaatgtacctgaaaggtccgcgt	918
Qy	856	gggtctgttatgataccaacatctacatgaaactcttccctgacgctggatcccaaatc	915
Db	919	gggtctgttatgataccaacatctacatgaaactcttccctgacgctggatcccaaatc	978
Qy	916	atcatcaagaataacgcgctcgtgttaacgaaggaataatctgtctgcaacaactgactgta	975
Db	979	atcatcaagaataacgcgctcgtgttaacgaaggaataatctgtctgcaacaactgactgta	1038
Qy	976	tacataaatgtgtgattgaagaacaagaatacgcgtctgataccaactctctcagct	1035
Db	1039	tacataaatgtgtgattgaagaacaagaatacgcgtctgataccaactctctcagct	1098
Qy	1036	gggtgagaagaatctgtctcgtcttgaaatcccggagcgttggtaactctgtctcaggta	1095
Db	1099	gggtgagaagaatctgtgtctcgtcttgaaatcccggagcgttggtaactctgtctcaggta	1158
Qy	1096	gttgttaatgaataccaagaacgaccgggttatcactaaacaaatgcaaaatgaactctgag	1155
Db	1159	gttgttaatgaataccaagaacgaccgggttatcactaaacaaatgcaaaatgaactctgag	1218
Qy	1156	gaacaacaatgaatacgaatctcgtttctatcgggtttccaccaggtctcaacataatcgtcaaa	1215
Db	1219	gaacaacaatgaatacgaatctcgtttctatcgggtttccaccaggtctcaacataatcgtcaaa	1278
Qy	1216	ctgggttcttccaactggttacaatctcagatcgaagaacgttctctctcgcaactctgggttcg	1275
Db	1279	ctgggttcttccaactggttacaatctcagatcgaagaacgttctctctcgcaactctgggttcg	1338
Qy	1276	ctctgggaagtctcaatcccggtctgatgacggttggtgggtgaaactccgcgtgttaa	1326
Db	1339	ctctgggaagtctcaatcccggtctgatgacggttggtgggtgaaactccgcgtgttaa	1389

RESULT 5
US-08-405-496A-25
; Sequence 25, Application US/08405496A
; Patent No. 5919665

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/405,496
 FILING DATE: 16-MAR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/329,154
 FILING DATE: 25-OCT-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/161,907
 FILING DATE: 02-DEC-1993
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/985,321
 FILING DATE: 04-DEC-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/429,791
 FILING DATE: 31-OCT-1989
 ATTORNEY/AGENT INFORMATION:
 NAME: INCOLIA, DIANE E.
 REGISTRATION NUMBER: 40,027
 REFERENCE/DOCKET NUMBER: OPHD-01763
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 22:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1330 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 NAME/KEY: CDS
 LOCATION: 1..1314
 US-08-913-138-22

Query Match 98.6% Score 1304.4; DB 4; Length 1330;
 Best Local Similarity 99.9% Pred. No. 0;
 Matches 1305; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 12 gatgtcacccttcacgaatacacaagaacacatcaatacctccatccctcctgaactcgcg 71
 Db 12 GCTGTCTACCTTCATGATATCAAGAACATCATCAATACCTCCATCTCGAAGCTCG 71
 Oy 72 ctacgaacccaatacctcgtacgtcctcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtc 131
 Db 72 CTACGAATCCAATCACTGATCGACCTGCTCTGCTGCTGCTGCTGCTGCTGCTGCTG 131
 Oy 132 taagttacactcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtc 191
 Db 132 TAAAGTTAACTTCGATCCGATCGACAGATCAATCAATCAATCAATCAATCAATCTTC 191
 Oy 192 caaaatcgaagttatcctcgaagaatcgtatcgtatcgaactcgtatcgaagaactcttc 251
 Db 192 CAANAATCGAAGTTATCTCGAAGATGCTATGCTATGCTATGCTATGCTATGCTATGCT 251
 Oy 252 cactctctcgttcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtc 311
 Db 252 CACTCTCTCTGGAATCGGTATCCCGAATATCTCAACTCCATCTCTCTGGAATGAATA 311
 Oy 312 caccatcatcactcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtc 371
 Db 312 CACCATCATCAACTGCTGGAATCAATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 371
 Oy 372 atcctcctcgttcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtc 431
 Db 372 AATCATCTGGACTCTCGAGGACACTCAGGAATCAACAGAGCTGCTGATTCNAATCTC 431
 Oy 432 tcaagatcatcactcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtc 491
 Db 432 TCAGATGATCAACATCTCTGATGATCAATCTCGATCTCTGATCTCTGATCAATCAACAA 491
 Oy 492 tctcgtcgaatacctcaaatctcacaacagccgtcgtcgtcgtcgtcgtcgtcgtcgtc 551

Db 492 TCCTCTGAATAAATCCAAATCTACATCAAGCGCGCTGATCGACGACGAAACCGATCTC 551
 Oy 552 caactcgggttaacatccacgtcctcacaacacatcattcacaactcgaactcgtcgtcga 611
 Db 552 CAATCTGGGTAAATCCAGCGCTCTTATACATCATGTTCAAACTGACACGGTTCTGCTGA 611
 Oy 612 caactcgggttaacatccacgtcctcacaacacatcattcacaactcgaactcgaactcga 671
 Db 612 CACTCACCGCTACATCTGATCAATCTTCAATCTGTTCCAAAGAACTGACGAAATA 671
 Oy 672 agaaatcaaaagacctgtacgacacccagttccatctctgttatactcgtcgaagacctctc 731
 Db 672 AGAATCAAAAGACCTGTACGACAAACCGTATACATGCTGAATCTGTACGATCCGAAATA 731
 Oy 732 tgaactcctcagtcagacaaacacgttactacatcgtcgaactcgtacgacacacacata 791
 Db 732 TGACTACCTGCGATGACGACAAACCGTATACATGCTGAATCTGTACGATCCGAAATA 791
 Oy 792 cgttcagcgtcaacatcgttaggtatcccggttacaatgtaacctgaaggtcccggttc 851
 Db 792 CGTTGACGTCACAAATCTAGGTATCCCGGTTACATGTACCTGAAGGTCCTCGGTGCTC 851
 Oy 852 tgtctatgactacaaatcctcactcgaactcctcctcgtacccgtggtacacaaatcactc 911
 Db 852 TGTATGACTACCAACATCTACCTGMACTCTTCCCTGTACCGTGTACCAATTCATCAT 911
 Oy 912 caagaatacctcgtcgttaggaacacacacacacacacacacacacacacacacacacac 971
 Db 912 CAAGAATAACCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 971
 Oy 972 caatgtttagttaagaac 1031
 Db 972 CAATGTGTGTAGTAAAGAACAAAGAAATACCGTCTGCTGCTGCTGCTGCTGCTGCTGCT 1031
 Oy 1032 agaaagactcttctcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtc 1091
 Db 1032 AGAAAGACTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1091
 Oy 1092 atcgaatacctcgaac 1151
 Db 1092 AATGAATCCAAAGACACCGGCTATACATGCTGAATGCTGAATGCTGAATGCTGAATGCT 1151
 Oy 1152 caatgtttagttaagaac 1211
 Db 1152 CAATGTGTGTAGTAAAGAACAAAGAAATACCGTCTGCTGCTGCTGCTGCTGCTGCTGCT 1211
 Oy 1212 tgcctcgaactcgtac 1271
 Db 1212 TGCCTCAACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1271
 Oy 1272 gaagttcatcccggttgatgacggttgggggtgaacgtcccggtgaa 1317
 Db 1272 GAAGTTCAATCCCGGTTGATGACGGTGGGTTGGGTTGGGTTGGGTTGGGTTGGGTTGG 1317

RESULT 4
 US-08-480-204A-25
 : Sequence 25 Application US/08480604A
 : Patent No. 5736139
 : GENERAL INFORMATION:
 : APPLICANT: KINE, JOHN A.
 : APPLICANT: THALLEY, BRUCE S.
 : APPLICANT: PADHYE, NISHA V.
 : APPLICANT: FIERA, JOSEPH R.
 : APPLICANT: STAFFORD, DOUGLAS C.
 : TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
 : PREVENTION OF C. DIFFICILE DISEASE
 : NUMBER OF SEQUENCES: 32
 : CORRESPONDENCE ADDRESS:
 : ADDRESSEE: MEDLEN & CARROLL, LLP
 : STREET: 220 MONTGOMERY STREET, SUITE 2200
 : CITY: SAN FRANCISCO
 : STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIO Release 11.0, Version 11.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,604A
FILING DATE: 07-JUN-1995
CLASSIFICATION: 424
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/422,711
FILING DATE: 14-APR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/405,496
FILING DATE: 16-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/329,154
FILING DATE: 25-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/161,907
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/985,321
FILING DATE: 04-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/429,791
FILING DATE: 31-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: INGOLIA, DIANE E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: OPND-01763
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 1402 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 1..1386
US-08-480-604A-25

Query Match 98.6%; Score 1304.4; DB 1; Length 1402;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1305; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Oy 12 gatgtacattcttcgaatcacatcaagaacatcatcaatccctccatctctgaacctgcy 71
|||||
Db 84 GCTGTACCTTCACTGAATACATCAAGAACATCATCAATACCTCCATCTCTGAACCTGCG 143
|||||

Oy 72 clacgaatccaatccatcgatcgactgtctcgctacgtctccaaatccaaatcgatc 131
|||||
Db 144 CTACGAATCCAAATCACTGATGACCTGTCTGCTACCTTCCAAATCAATCGCTTC 203
|||||

Oy 132 taaggttaacttcgaatccgaatcgacgaatcgatccagctgttcaatcggaatttc 191
|||||
Db 204 TAAATTTAACTTGTATCCGATCGACAGAAATCGATCCGCTGTTCATCTGGAATCTTC 263
|||||

Oy 192 caaaatcgagttatcttcgaagaatgctatgatacaaatcttatgacgaatctctc 251
|||||
Db 264 CAAATCGAAGTTATCTTGAAGAAATGCTATCGTATACAACTCTATGTACGAAGAACTTC 333
|||||

Oy 252 cactctcttgatcgatccggaatcaacttcaatccatctctctgaaatgaata 311
|||||
Db 324 CACCTCTCTGATCCGATCCGATCCGAAATACTTCAACTCCATCTCTCTGAACAAATGAATA 383
|||||

Oy 312 caccatcatcaatcgatggaaacaattctggttggaaagtatctctgaactacgtg 371
|||||
Db 384 CACCATCATCACTGCATGGAAACAANTCTGGTTGGAAAGTATCTCTGAACATACGCTGA 443
|||||

Oy 372 aatcatcgactctcgaggacactcaggaatcaaacagcgtgtgttatcaatactc 431
|||||
Db 444 ATATCTTGGACTCTCGAGACACTCAGGAATCAACAACGCTGTGTATTAATCAATACTC 503
|||||

Oy 432 taagtatgaatcaatctctgactacatcaatcgctggatctctgattaccatcaacaacaa 491
|||||
Db 504 TCAGATGATCAACATCTCTGACTATCATCAATCGCTGGATCTTGGTACCATACCAACAA 563
|||||

Oy 492 tcgctcgaataactccaaatctcatcaacggtcgtctgactcgaccagaacacgactc 551
|||||
Db 564 TCGCTCAATCAATCTCAAAATCTACATCAACGCGCTCTGATCGACCAACACCGATCTC 623
|||||

Oy 552 caatctggglaacatccacgtctcttaataacatcatgttcaaatcgagcggctctgctg 611
|||||
Db 624 CAATCTGGGTAAACATCCAGCTTCTTATATACATCATGTTCAACTGCAGCGTGTCTGCTGA 683
|||||

Oy 612 cactcacgctacatctggttcaaatctcaatctctgacacaaacacacacacacacac 671
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RESULT 5
US-08-405-496A-25
: Sequence 25, Application US/08405496A
: Patent No. 5919665

GenCore version 4.5
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ON nucleic - nucleic search, using sw model

Run on: September 16, 2002, 21:32:06 ; Search time 139.08 seconds
(without alignments)
2336.591 Million cell updates/sec

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Gapop 10.0 , Gapext 1.0

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Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	1304.4	98.6	1330	2	US-08-405-496A-22
3	1304.4	98.6	1330	4	US-08-915-136-22
4	1304.4	98.6	1402	1	US-08-480-604A-25
5	1304.4	98.6	1402	2	US-08-405-496A-25
6	1304.4	98.6	1402	4	US-08-915-136-25
7	726.4	54.9	3891	1	US-08-480-604A-27
8	726.4	54.9	3891	2	US-08-405-496A-27
9	726.4	54.9	3891	4	US-08-915-136-27
10	166.4	12.6	1359	1	US-07-618-312A-3
11	166.4	12.6	1359	1	US-08-280-228-3
12	74.2	5.6	1359	1	US-07-618-312A-1
13	74.2	5.6	1359	1	US-08-280-228-1
14	74.2	5.6	1359	1	US-08-110-786A-7
15	74.2	5.6	1359	1	US-08-668-381A-6
16	60	4.5	5311	3	US-08-928-381B-2
17	60	4.5	5311	3	US-08-328-381B-1
18	57	4.3	5163	3	US-08-700-631A-1
19	57	4.3	5163	3	US-08-928-381B-4
20	57	4.3	5318	3	US-08-700-631A-2
21	57	4.3	5318	3	US-08-928-381B-3
22	40	3.0	1690	2	US-08-276-452A-24
23	40	3.0	1690	2	US-08-798-744A-24
24	37.8	2.9	2277	1	US-08-676-967-2
25	37.8	2.9	2277	1	US-08-676-967-2
26	37.8	2.9	2277	2	US-09-098-487-2
27	37.2	2.8	18596	4	US-09-318-448-11

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5915665

28	36.8	2.8	1430	1	US-08-276-452A-25	Sequence 25, Appl
29	36.8	2.8	1430	2	US-08-798-744-25	Sequence 25, Appl
30	34.6	2.6	2094	3	US-08-714-918-87	Sequence 87, Appl
31	34.6	2.6	2094	4	US-09-265-315-87	Sequence 87, Appl
32	34.6	2.6	2094	4	US-09-265-315-87	Sequence 87, Appl
33	34.6	2.6	2094	4	US-09-266-417-87	Sequence 87, Appl
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35	34.4	2.6	951	1	US-07-855-412B-2	Sequence 2, Appl
36	34.4	2.6	951	2	US-08-308-887A-2	Sequence 2, Appl
37	34.2	2.6	951	3	US-08-881-09A-2	Sequence 2, Appl
38	34.2	2.6	198	5	PCT-US95-10568-1	Sequence 1, Appl
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44	34.2	2.6	3292	5	US-08-328-809-7	Sequence 7, Appl
45	34	2.6	1666	4	PCT-US92-11107-12	Sequence 12, Appl
					US-09-134-607A-8	Sequence 8, Appl

ALIGNMENTS

RESULT 1
US-08-480-604A-22
Sequence 25, Appl
Patent No. 5736139
GENERAL INFORMATION:
APPLICANT: KINK, JOHN A.
APPLICANT: THALLEY, BRUCE S.
APPLICANT: PADHYE, NISHA V.
APPLICANT: FIRCA, JOSEPH R.
APPLICANT: STAFFORD, DOUGLAS C.
TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND PREVENTION OF C. DIFFICILE DISEASE
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESSES:
ADDRESSEE: MEDLEN & CARROLL, LLP
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,604A
FILING DATE: 07-JUN-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/422,711
FILING DATE: 14-APR-1995
PRIOR APPLICATION NUMBER: US 08/405,496
FILING DATE: 16-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/329,154
FILING DATE: 25-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/161,907
FILING DATE: 02-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/985,321
FILING DATE: 04-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/429,791
FILING DATE: 31-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: INGOLIA, DIANE E.
REGISTRATION NUMBER: 40,027

Handwritten signature and initials.

Wed Sep. 18 09:34:28 2002

us-09-611-419a-3.rge

Page 1

GenCore version 4.5
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OK nucleic - nucleic search, using sw model

Run on: September 16, 2002, 21:29:41 ; Search time 7254.67 Seconds
(without alignments)
3816.274 Million cell updates/sec

Title: us-09-611-419a-3

Perfect score: 1333

Sequence: 1 gaattcaaacagatgtctac.....aacgtccgctgaagattc 1333

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

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Total number of hits satisfying chosen parameters: 3595312

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

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- 29: em_vi.*
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- 31: em_hg_inv.*
- 32: em_hg_other.*
- 33: em_hgo_inv.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query Score	Match Length	DB ID	Description
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ALIGNMENTS

RESULT	LOCUS	DEFINITION	ACCESSION	VERSION	KEYWORDS	SOURCE	ORGANISM	REFERENCE	AUTHORS	TITLE	JOURNAL	FEATURES	BASE COUNT	ORIGIN
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1	AR000029	Sequence 22 from patent US 5736139.	AR000029	1	GI:3962560	Unknown.	Unknown.	Unclassified.	1 (bases 1 to 1330)	Kink, J.A., Thalley, B.S., Stafford, D.C., Pirca, J.R. and Padhye, N.V.	Treatment of Clostridium difficile induced disease	Patent: US 5736139-A 22 07-APR-1998;	400 a	400 a
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1330 bp	DNA	Linear	PAT 04-DEC-1998											
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3

Source

1. 1330

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339 c

246 g

345 t

Query Match 98.6%

Best Local Similarity 99.9%

Score 1304.4; DB 6; Length 1330;

Pred. No. 0;

REFERENCE/DOCKET NUMBER: OPHD-01763

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 22:

SEQUENCE CHARACTERISTICS:

LENGTH: 1330 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

FEATURE:

NAME/KEY: CDS

LOCATION: 1..1314

US-08-480-604A-22

Query Match 98.6% Score 1304.4; DB 1; Length 1330;
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RESULT 2

US-08-405-480A-22
 : Sequence 22, Application US/08405496A
 : Patent No. 5591965
 : GENERAL INFORMATION:
 : APPLICANT: WILLIAMS, JAMES A.
 : TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM
 : NUMBER OF SEQUENCES: 30
 : CORRESPONDENCE ADDRESS:
 : ADDRESS: MEDLEN & CARROLL, LLP
 : STREET: 220 MONTGOMERY STREET, SUITE 2200
 : CITY: SAN FRANCISCO
 : STATE: CALIFORNIA
 : COUNTRY: USA
 : ZIP: 94104
 : COMPUTER READABLE FORM:
 : MEDIUM TYPE: Floppy disk
 : COMPUTER: IBM PC compatible
 : OPERATING SYSTEM: PC-DOS/MS-DOS
 : SOFTWARE: Patent In Release #1.0, Version #1.30
 : CURRENT APPLICATION DATA:
 : APPLICATION NUMBER: US/08/405,496A
 : FILING DATE: 16-MAR-1995
 : CLASSIFICATION: 424
 : PRIOR APPLICATION DATA:
 : APPLICATION NUMBER: US 08/329,154
 : FILING DATE: 25-OCT-1994
 : PRIOR APPLICATION DATA:
 : APPLICATION NUMBER: US 08/161,907
 : FILING DATE: 02-DEC-1993
 : PRIOR APPLICATION DATA:
 : APPLICATION NUMBER: US 07/985,321
 : FILING DATE: 04-DEC-1992
 : PRIOR APPLICATION DATA:
 : APPLICATION NUMBER: US 07/429,791


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Best Local Similarity 100.0%; Pred. No. 0;
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DE 79 cctctgtctgtctaccttccactgaatacatcaagaacatcatcatctccatctcgaac 138

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Qy	376	ggtagaatctctggactctgcagagacactcggaaatacgaatacaaacagcgtgtgtattcaaa	435
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Db	559	AACAATCGTCTCAATTAAGTCCAAATCTCAAAATCTACATCAACGGCGCTCTGATCGACCAACCG	618
Qy	556	atctccaaactcgggttaacataccacgctctctaataactcatgtccaacgtggagcgttgt	615
Db	619	ATCTCCAAATCTGGGTACATGCCAGCTCTTAATAACCATCATGTTTCNAKCTGGACGGTGT	678
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Qy	736	tggggtagactacctcgagtagacaacaaacgctactacatcgtgaactcgtgacgatccgaac	795
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Qy	796	aaatacgttgcagctonaacaatgtaggtataccggggttaccatgactacccgaaaggtccgcgt	855
Db	859	AAATAGCTTGAGCTCAACAATGTAGGTATCCGGCGTTACATGATACCTTACCTGTAAGAGTCCGCT	918
Qy	856	ggttctgttatgactaccaacatctcacctgaactctccctgtagcgtcgtgaccacaaactc	915
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Qy	976	tacataaatgtgtagttaagaacaaagaataacgctcgtggctaccatcgtctctcaggct	1035
Db	1039	TACATCAATGTGTAGTTAAGAACAAAGAATACCGCTTGGCTACCAATGCTTCTCAGGCT	1098
Qy	1036	gggttagaagaagatacttgtctcgtctcgtgaaatcccgagcgtctggtaactcgtctcagata	1095
Db	1099	GGGTAGAAAAAGATCTGTCTCTCGAANAATCCGGAGCTTGGTAAATCTGTCTCAGGTA	1158
Qy	1096	gttgtaatgaataccaaagacacacggggtatacctaacaataatgacaaatgaatctcgag	1155
Db	1159	GTGTGTAAATGAATCCAAAGAACCGACGGGTATCTACTACAAATGAAATGAATGTCCAG	1218
Qy	1156	gacacaaatggtaacgatatacggtttccatcgggtttccaccaggtttcaacatactcgtcaaa	1215